Atty. Dkt. No. 10019765-1

REMARKS

Claims 1-18 were pending. Claims 1-18 were rejected. By the above amendments, the Applicants have canceled claims 1, 2, 8, 10, 11, and 18, amended claims 3-6, 9, 12-15, and 17, and added new claims 19 and 20. Accordingly, claims 3-7, 9, 12-17, 19, and 20 are currently pending. The Applicant hereby requests further consideration and re-examination in view of the amendments made above and remarks set forth below.

Claim Rejections under 35 U.S.C. § 103:

Claims 1-18 were rejected under 35 U.S.C. § 103(a) as being obvious. Claims 1, 2, 6, 7, 10, 11, 15, and 16 were rejected as obvious over U.S. Patent No. 6,728,807 to Laursen in view of U.S. Patent No. 6,934,260 to Kanuri. Claims 3, 4, 8, 9, 12, 13, 17, and 18 were rejected as obvious over U.S. Patent No. 6,728,807 to Laursen in view of U.S. Patent No. 6,934,260 to Kanuri and further in view of U.S. Patent No. 5,872,904 to McMillen et al. Claims 5 and 14 were rejected as obvious over U.S. Patent No. 6,728,807 to Laursen in view of U.S. Patent No. 6,934,260 to Kanuri and further in view of U.S. Patent No. 6,934,253 to Hoogenboom et al.

U.S. Patent No. 6,728,807 to Laursen:

Laursen teaches a network switch 2 that includes a plurality of port blades, 6a through 6h, and a switch fabric blade 8, where the switch fabric blade 8 provides the port blades, 6a through 6h, half of their maximum bandwidth. (Col. 2, lines 20-32, and figure 2.)

U.S. Patent No. 6,934,260 to Kanuri:

Kanuri teaches a switch 12 that includes switch ports 20 and a switch fabric 25, where each switch port 20 includes a media access control module 22. (Col. 3, lines 33-39, and figure 1.)

U.S. Patent No. 5,872,904 to McMillen et al.:

McMillen et al. teach a general purpose multiprocessor computer system 10 that includes processor modules 12 coupled by switch nodes 16 of redundant networks 14. (Col. 5, lines 8-35, and figure 1.) Each processor module 12 has a separate controller 18

for interfacing the processor module to each network 14. (Col. 6, lines 41-42.) Switch nodes 16 are 8x8 switch nodes having eight input port logics (IPLs) 36 and eight output port logics (OPLs) 38. Each switch node 16 is a crossbar switch so that each input port can be connected to any of the output ports. (Col. 9, line 60-col. 10, line 8, and figure 4.)

Every controller 18 is interfaced to a diagnostic processor 140, which in turn interfaces with switch nodes 16 and participate in reconfiguring the network 14 when errors are detected. A switch node 16 may detect faults including parity errors, hard carrier loss, data over runs, back channel loss, forward channel loss, soft carrier loss, null loss, idle loss, FIFO errors, violation errors, tag errors, command/reply errors, time outs, and merge errors. A diagnostic processor 140 via the diagnostic port logic of a switch node 16 may perform two activities within the switch node 16, which are reading and writing selected registers, and sending information out any back channel 34 output. (Col. 11, line 65-col. 12, line 20, and figures 4 and 5.)

At startup, each diagnostic processor 140 enables output and input ports of the switch ports 16 on its board. A master processor module 12 receives raw topology information from the diagnostic processors 140 and calculates mapping tables 108. If faults are reported, the calculations simulate the removal of the faulty component by deleting the appropriate entries from the raw topology information. For example, if a switch node 16 has failed, up to 16 links may deleted. Input and output ports of the switch node 16 are disabled. (Col. 23, line 62-col. 24, line 65.)

U.S. Patent No. 6,934,253 to Hoogenboom et al.:

Hoogenboom et al. teach an ATM switch that includes input ports 310, a switching fabric 300, and output port logic units 320. Each output logic unit 320 includes a data buffer 340, an output port 330, output control 350, and rate filter 360. (Col. 4, lines 16-28.) Hoogenboom et al. further teach a connection-based congestion control strategy implemented by the output control 350. When a data unit is added to the data buffer 340, the output control 350 increments a backlog value of a corresponding store and monitors the store to determine if a maximum value has been exceeded. If the maximum value is exceeded and a rate limitation has not yet been imposed, the output control 350 imposes the rate limitation. (Col. 5, lines 32-44.)

Claim 3:

Claim 3 has been amended to include the claim limitations of canceled claims 1 and 2 from which it originally was dependent. Claims 3 was rejected as obvious over Laursen in view of Kanuri and further in view of McMillen et al., which is respectfully traversed.

Claim 3 claims an excess-port network switch that includes a plurality of ports, a switch fabric, a controller, and a temperature sensor included in each of the ports. The plurality of ports is configured to receive and transmit data. Each port is adapted to have a respective configured throughput. The switch fabric is configured to route data between the plurality of ports and to have a predetermined throughput. The predetermined throughput is less than a total of the respective configured throughputs of the plurality of ports. The controller is configured to interface with the plurality of ports. The controller is configured to disable at least one port of the plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit.

There are at least two differences between claim 3 and the combination of Laursen, Kanuri, and McMillen et al. The first difference is that neither Laursen nor Kanuri nor McMillen et al. teach a switch having a temperature sensor in each port. In fact, the Office Action fails to address this claim limitation.

The second difference is that neither Laursen nor Kanuri nor McMillen et al. teach the claim limitation of "*said controller is configured to disable at least one port of said plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit.*"

Rather, the rejection of claim 3 relies upon official notice for the proposition that this claim limitation is well known and expected in the art, which is respectfully traversed. Official notice for this proposition is not proper for at least two reasons.

First, MPEP § 2144.03A provides that "[o]fficial notice unsupported by documentary evidence should only be taken ... where the facts asserted to be well known, or to common knowledge in the art are capable of instant and unquestionable demonstration as being well-known." MPEP § 2144.03A gives two examples that meet such an *instant and unquestionable demonstration as being well known in the art.* The first example is "adjust[ing] intensity of a flame in accordance with [a] heat

requirement." The second example is "that tape recorders commonly erase tape automatically when new 'audio information' is recorded on a tape which already has a recording on it." These examples are so widely known that they must be *instantly and unquestionably* recognized as known in the art. The claim limitation of "*said controller is configured to disable at least one port of said plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit*" does not meet such a standard.

Second, MPEP § 2144.03A provides that "[i]t would not be appropriate ... to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known." Here, the claim limitation of "*said controller is configured to disable at least one port of said plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit*" is not capable of instant and unquestionable demonstration as being well known.

Thus, there are at least two differences between claim 3 and the combination of Laursen, Kanuri, and McMillan et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillan et al., such a combination would not teach or suggest these differences. Accordingly, claim 3 is allowable over Laursen in view of Kanuri and further in view of McMillan et al. and an allowance at an early date would be greatly appreciated.

Claims 4-7:

Claim 4 was rejected as obvious over Laursen in view of Kanuri and further in view of McMillen et al., which is respectfully traversed.

Claim 4 is dependent upon allowable base claim 3. As discussed above there are at least two differences between claim 3 and the combination of Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillen et al., such a combination would not teach or suggest these differences. Accordingly, claim 4 is allowable over Laursen in view of Kanuri and further in view of McMillen et al. and an allowance at an early date would be greatly appreciated.

Claim 5 was rejected as obvious over Laursen in view of Kanuri and further in view of Hoogenboom et al.

Claim 5 is dependent upon allowable base claim 3. As discussed above, there are at least two differences between claim 3 and the combination of Laursen, Kanuri, and McMillen et al. Hoogenboom et al. does not teach the features of claim 3 that are missing from Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and Hoogenboom et al., such a combination would not teach or suggest these differences. Accordingly, claim 5 is allowable over Laursen in view of Kanuri and further in view of Hoogenboom et al. and an allowance at an early date would be greatly appreciated.

Claims 6 and 7 were rejected as obvious over Laursen in view of Kanuri, which is respectfully traversed.

Claims 6 and 7 are dependent upon allowable base claim 3. As discussed above there are at least two differences between claim 3 and the combination of Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen and Kanuri, such a combination would not teach or suggest these differences. Accordingly, claims 6 and 7 are allowable over Laursen in view of Kanuri, and an allowance at an early date would be greatly appreciated.

Claim 9:

Claim 9 has been amended to include most of the claim limitations of canceled claims 1 and 8 from which it originally was dependent. Claims 9 was rejected as obvious over Laursen in view of Kanuri and further in view of McMillen et al.

Claim 9 claims an excess-port network switch that comprises a plurality of ports and a switch fabric. The ports are configured to receive and transmit data. Each port is adapted to have a respective configured throughput. The switch fabric is configured to route the data between the ports and also configured to have a predetermined throughput. The predetermined throughput of the switch fabric is less than a total of the respective configured throughputs of the ports. At least one port of the plurality of ports is configured to disable in response to an internal temperature of the at least one port exceeding a temperature limit.

There is at least one difference between claim 9 and the combination of Laursen, Kanuri, and McMillen et al. The difference is that neither Laursen nor Kanuri nor McMillen et al. teach the claim limitation of "*at least one port of said plurality of ports is configured to disable in response to an internal temperature of said at least one port exceeding a temperature limit.*"

Rather, the rejection of claim 9 relies upon official notice for the proposition that this claim limitation is well known and expected in the art, which is respectfully traversed. Official notice for this proposition is not proper. As discussed above, official notice for a proposition that a claim limitation is well known and expected in the art is only proper when the claim limitation is *instantly and unquestionably* recognized as known in the art. The claim limitation of "*at least one port of said plurality of ports is configured to disable in response to an internal temperature of said at least one port exceeding a temperature limit*" does not meet such a standard.

Thus, there is at least one difference between claim 9 and the combination of Laursen, Kanuri, and McMillan et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillan et al., such a combination would not teach or suggest this difference. Accordingly, claim 9 is allowable over Laursen in view of Kanuri and further in view of McMillan et al. and an allowance at an early date would be greatly appreciated.

Claim 12:

Claim 12 has been amended to include the claim limitations of claim 10 and 11 from which it originally was dependent. Claim 12 was rejected as obvious over Laursen in view of Kanuri and further in view of McMillen et al., which is respectfully traversed.

Claim 12 claims an excess-port network switch that includes a plurality of ports, a switch fabric, a controller, and a temperature sensor included in each of the ports. The plurality of ports is configured to receive and transmit data. Each port has a respective projected throughput. The switch fabric is configured to route data between the plurality of ports and to have a predetermined throughput. The predetermined throughput is less than a total of the respective projected throughputs of the plurality of ports. The controller is configured to interface with the plurality of ports. The controller is

configured to disable at least one port of the plurality of ports in response to a respective temperature sensor sensing a temperature exceeding a temperature limit.

There are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillen et al. The first difference is that neither Laursen nor Kanuri nor McMillen et al. teach a switch having a temperature sensor in each port. In fact, the Office Action fails to address this claim limitation.

The second difference is that neither Laursen nor Kanuri nor McMillen et al. teach the claim limitation of "*said controller is configured to disable at least one port of said plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit.*"

Rather, the rejection of claim 12 relies upon official notice for the proposition that this claim limitation is well known and expected in the art, which is respectfully traversed. Official notice for this proposition is not proper. As discussed above, official notice for a proposition that a claim limitation is well known and expected in the art is only proper when the claim limitation is *instantly and unquestionably* recognized as known in the art. The claim limitation of "*said controller is configured to disable at least one port of said plurality of ports in response to respective temperature sensor sensing a temperature exceeding a temperature limit*" does not meet such a standard.

Thus, there are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillan et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillan et al., such a combination would not teach or suggest these differences. Accordingly, claim 12 is allowable over Laursen in view of Kanuri and further in view of McMillan et al. and an allowance at an early date would be greatly appreciated.

Claim 13-18:

Claim 13 was rejected as obvious over Laursen in view Kanuri and further in view of McMillen et al., which is respectfully traversed.

Claim 13 is dependent upon allowable base claim 12. As discussed above there are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillen et al., such a combination would

not teach or suggest these differences. Accordingly, claim 13 is allowable over Laursen in view of Kanuri and further in view of McMillen et al., and an allowance at an early date would be greatly appreciated.

Claim 14 was rejected as obvious over Laursen in view of Kanuri and further in view of Hoogenboom et al.

Claim 14 is dependent upon allowable base claim 12. As discussed above, there are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillen et al. Hoogenboom et al. does not teach the features of claim 12 that are missing from Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and Hoogenboom et al., such a combination would not teach or suggest these differences. Accordingly, claim 14 is allowable over Laursen in view of Kanuri and further in view of Hoogenboom et al. and an allowance at an early date would be greatly appreciated.

Claims 15 and 16 were rejected as obvious over Laursen in view of Kanuri, which is respectfully traversed.

Claims 15 and 16 are dependent upon allowable base claim 12. As discussed above there are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen and Kanuri, such a combination would not teach or suggest these differences. Accordingly, claims 15 and 16 are allowable over Laursen in view of Kanuri and an allowance at an early date would be greatly appreciated.

Claims 17 was rejected as obvious over Laursen in view of Kanuri and further in view of McMillen et al., which is respectfully traversed.

Claim 17 is dependent upon allowable base claim 12. As discussed above there are at least two differences between claim 12 and the combination of Laursen, Kanuri, and McMillen et al. Assuming for the sake of argument that there was a motivation or suggestion to combine Laursen, Kanuri, and McMillen et al., such a combination would not teach or suggest these differences. Accordingly, claims 17 is allowable over Laursen in view of Kanuri and further in view of McMillen et al. and an allowance at an early date would be greatly appreciated.

New Claims 19 and 20:

Claims 19 and 20 are dependent upon allowable base claim 9. Accordingly, for at least this reason, claims 19 and 20 are allowable and an allowance at an early date would be greatly appreciated.

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Conclusion:

In view of the above, the Applicant submits that all of the pending claims are now allowable. Allowance at an early date would be greatly appreciated. Should any outstanding issues remain, the Examiner is encouraged to contact the undersigned at (408) 293-9000 so that any such issues can be expeditiously resolved.

Respectfully Submitted,

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